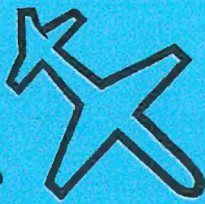


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1



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ARITHMETIC WORKBOOK



4

Happy Times With

8



NUMBERS



SECOND BOOK



6

3



EVELYN FERSHING



7



10



5

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Happy Times with Numbers

Second Book

by
Evelyn Fershing

NEWARK, NEW JERSEY

Illustrated by Herbert Townsend



1951

Allyn and Bacon

BOSTON NEW YORK CHICAGO ATLANTA DALLAS SAN FRANCISCO

To Teachers

This Second Book in counting continues the study of numbers, including one to fifty, with practice in counting by tens to one hundred. The emphasis is placed on the "teens," so that the pupils, in recognizing the relationship between "ten" and the endings "teen" and "ty," may gain a clear understanding of the numbers beyond ten — how they are made, why they are made, and when they are made. Near the end of the book the pupils are introduced to orthodox addition and subtraction and are given a hint of what "one half," "one third," etc., mean.

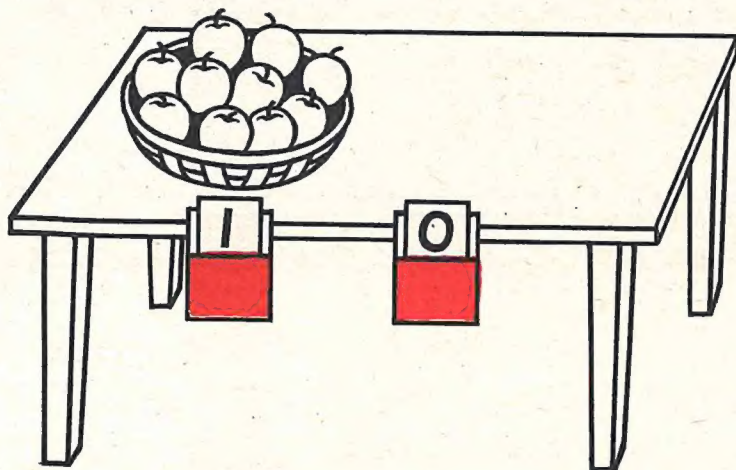
The Second Book is happily illustrated by the same artist who so successfully drew the Curly-Cues for the First Book, but this time the little man who points the way in the lessons is a chubby Billiken.

Teaching directions for each lesson will be found at the end of the book and, in greater detail, in the teachers' manual. The lesson pages themselves have purposely been kept free of directions, and the pupil, as a result, finds no small type to confuse him and gains on every page the largest possible area in which to work.

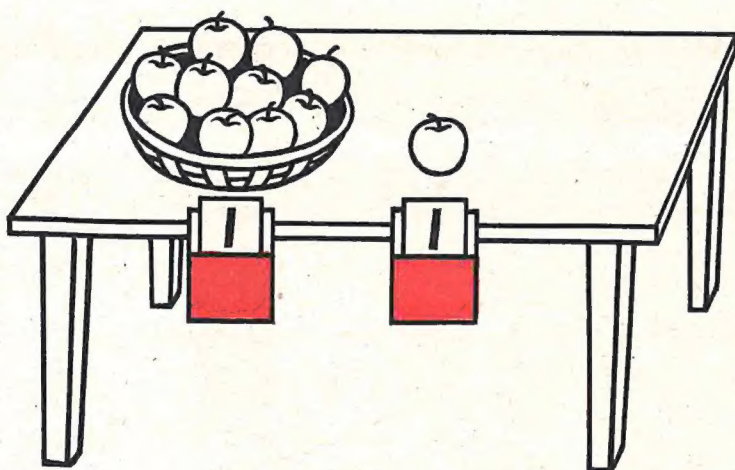
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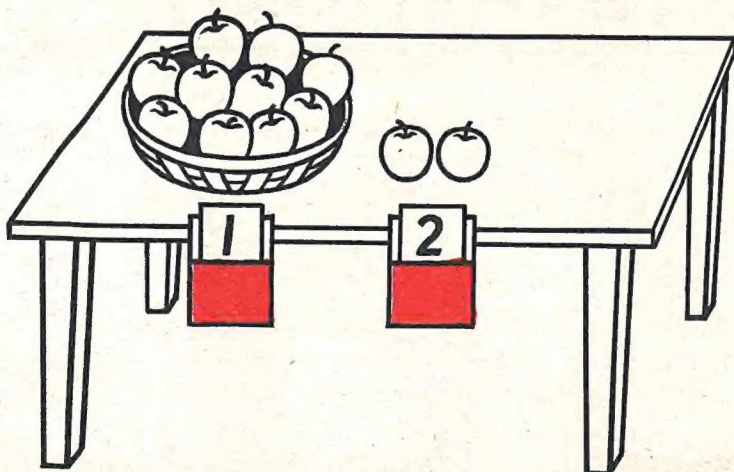
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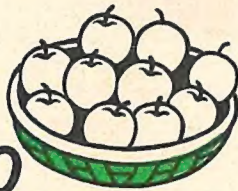



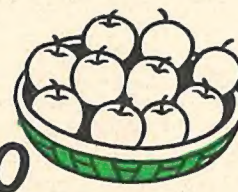


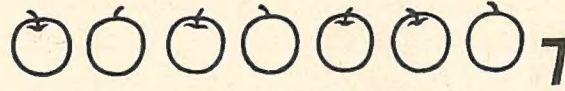


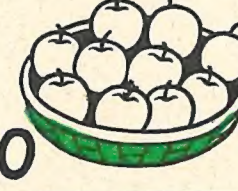
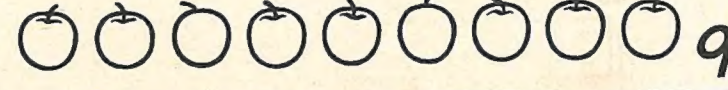


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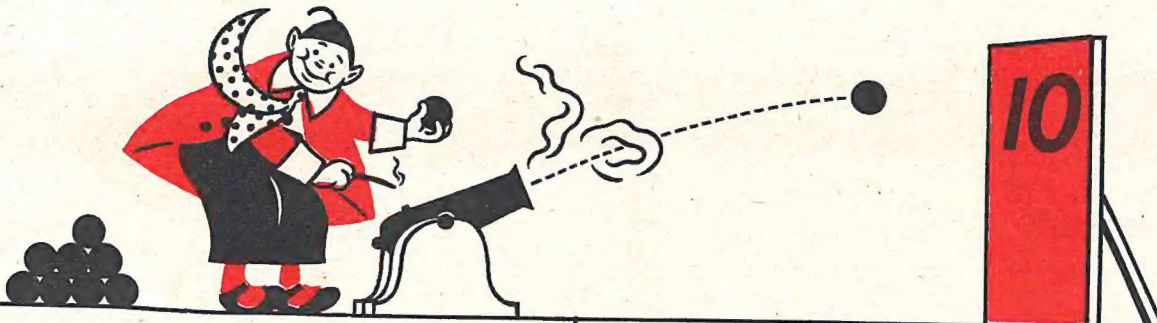


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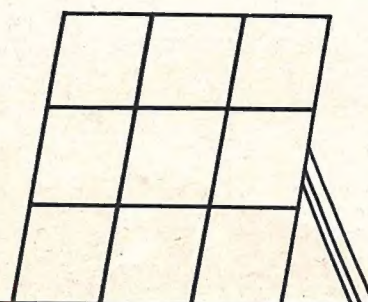
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○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 10	○ ○ ○ ○ ○ ○ ○ ○ 8	
○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 10	○ ○ ○ ○ ○ ○ ○ ○ ○ 9	
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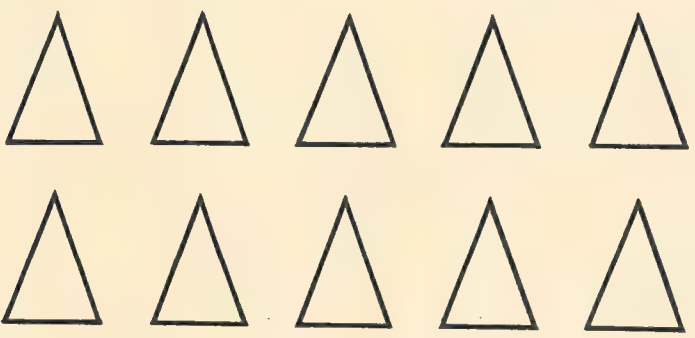
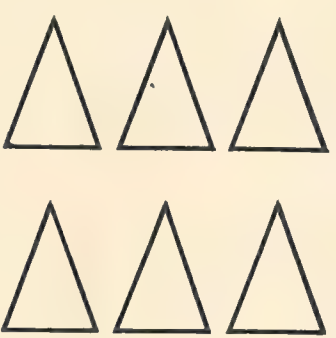



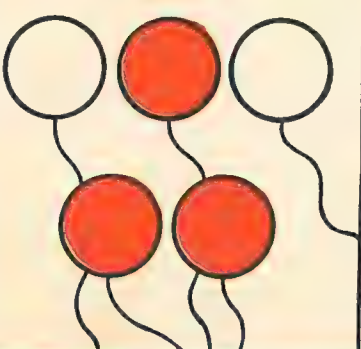
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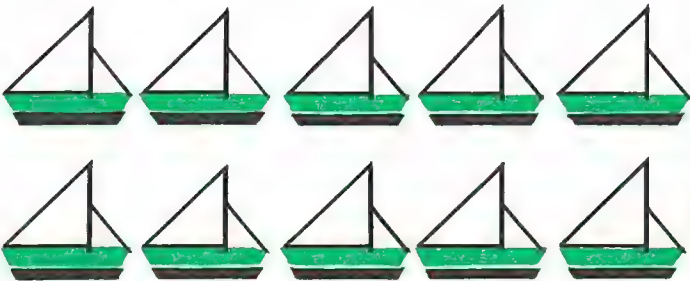
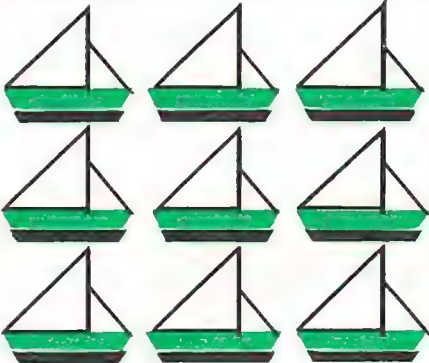
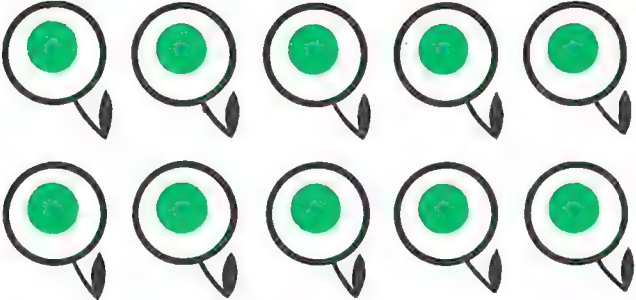

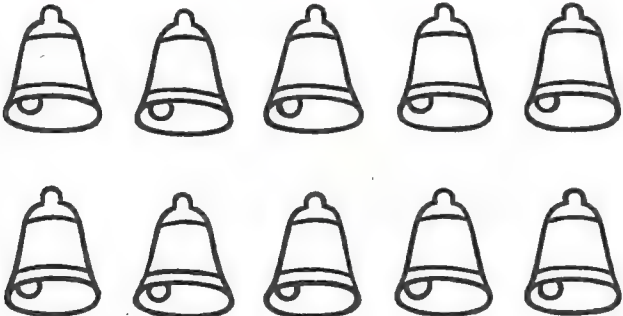
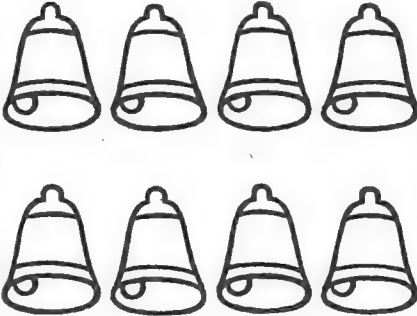
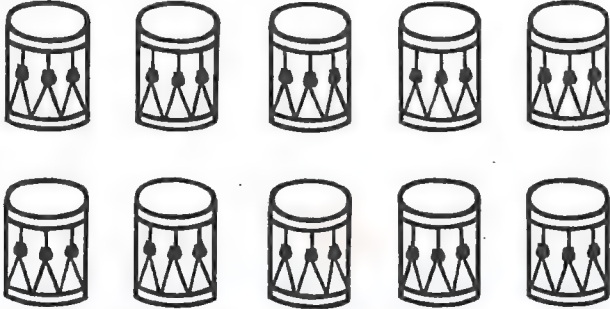
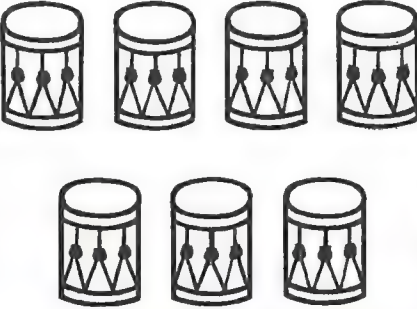
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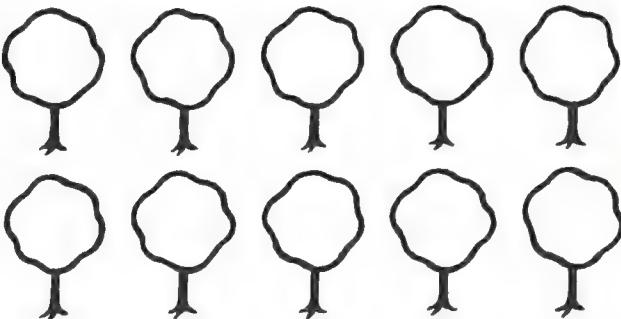
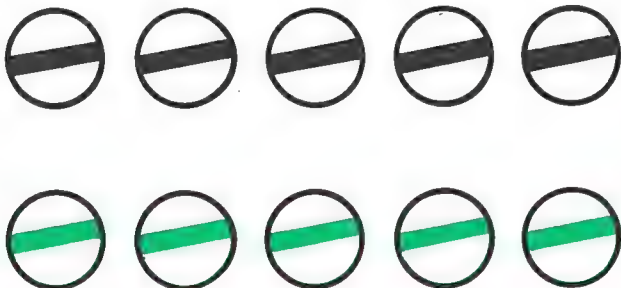
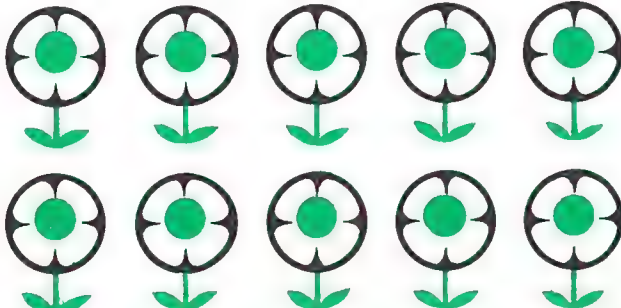



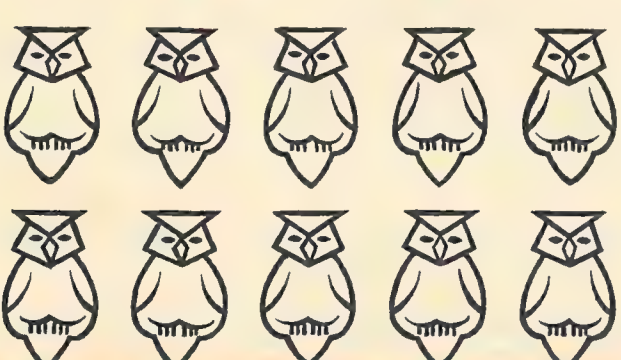


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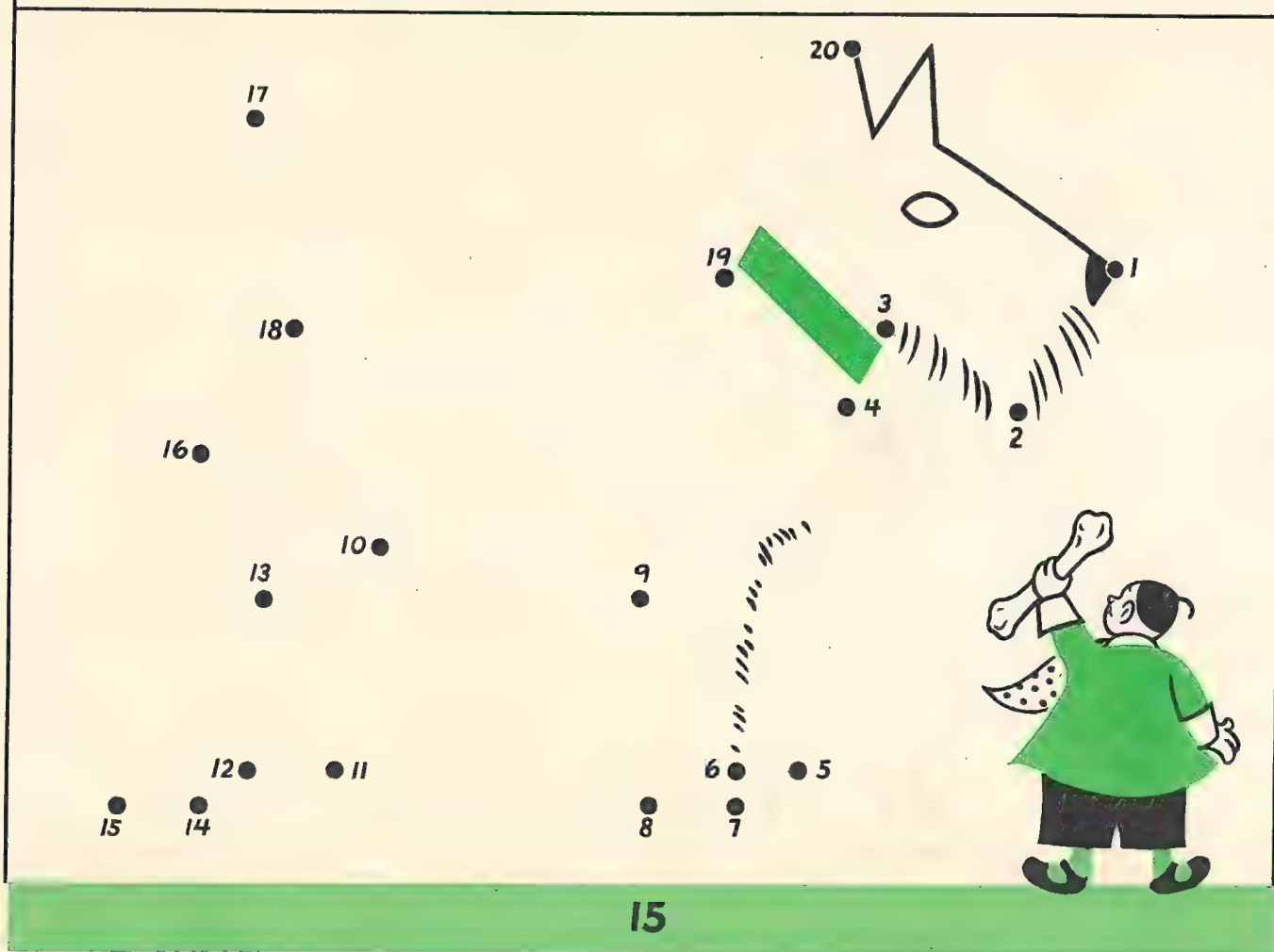
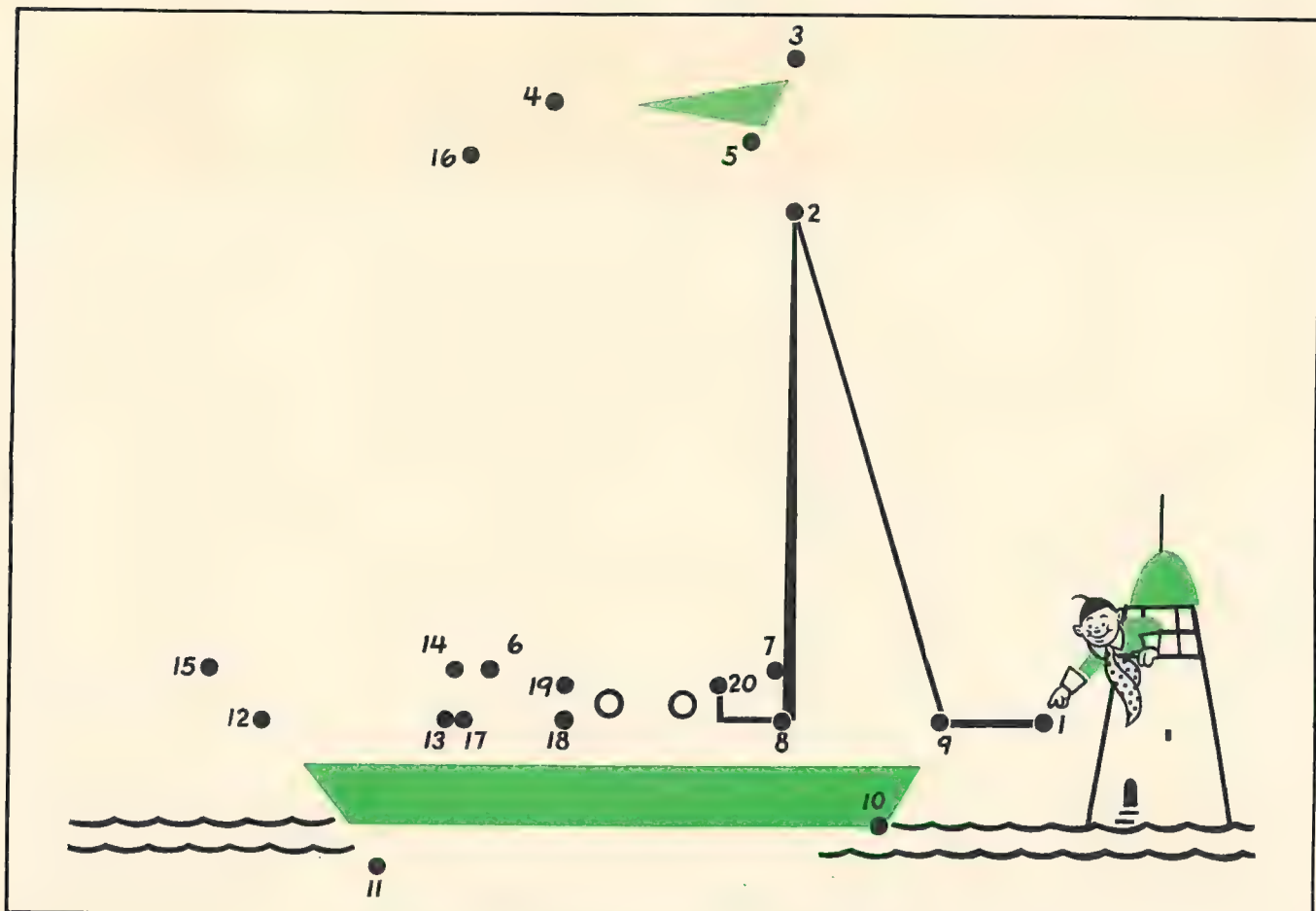


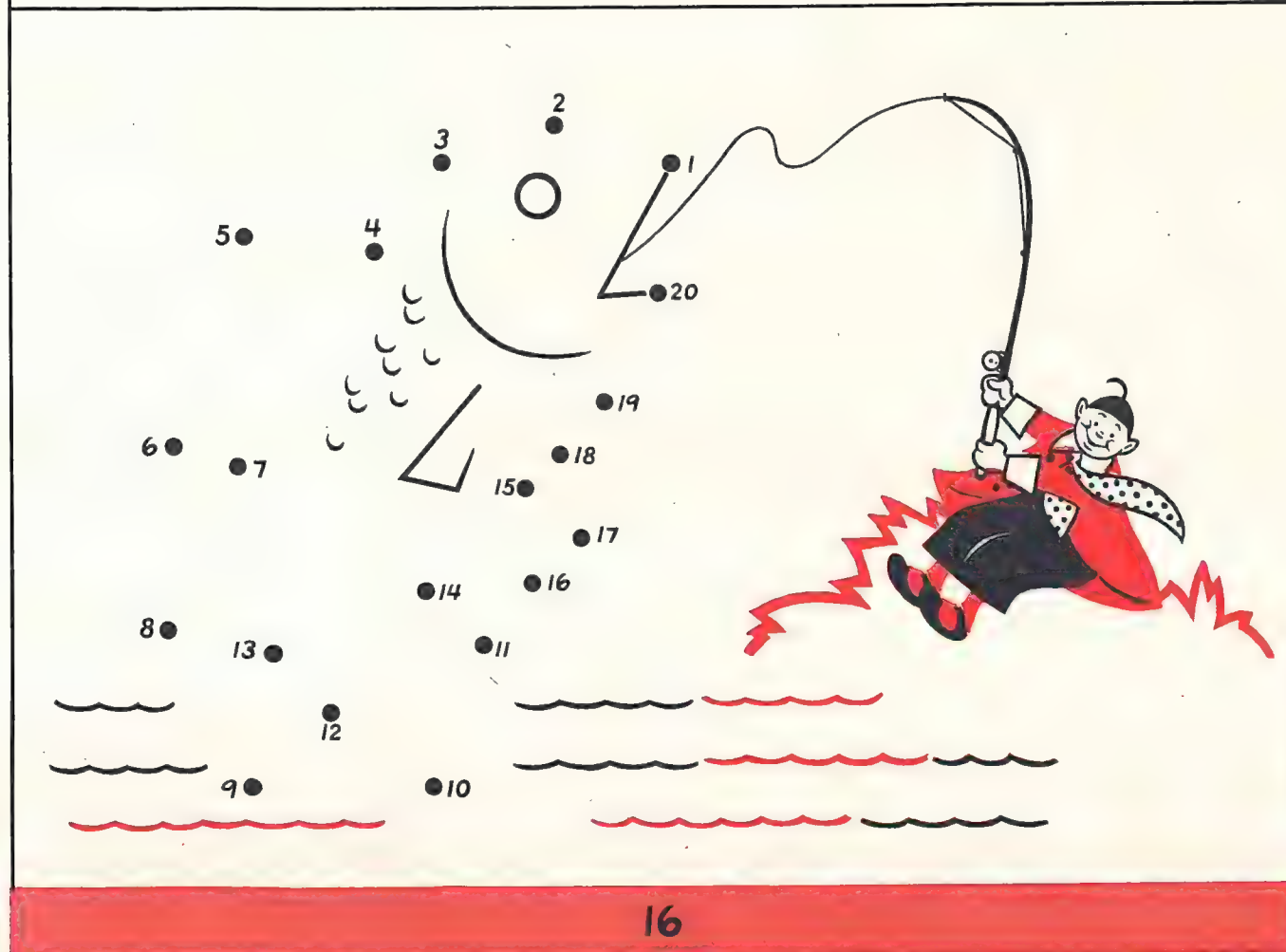
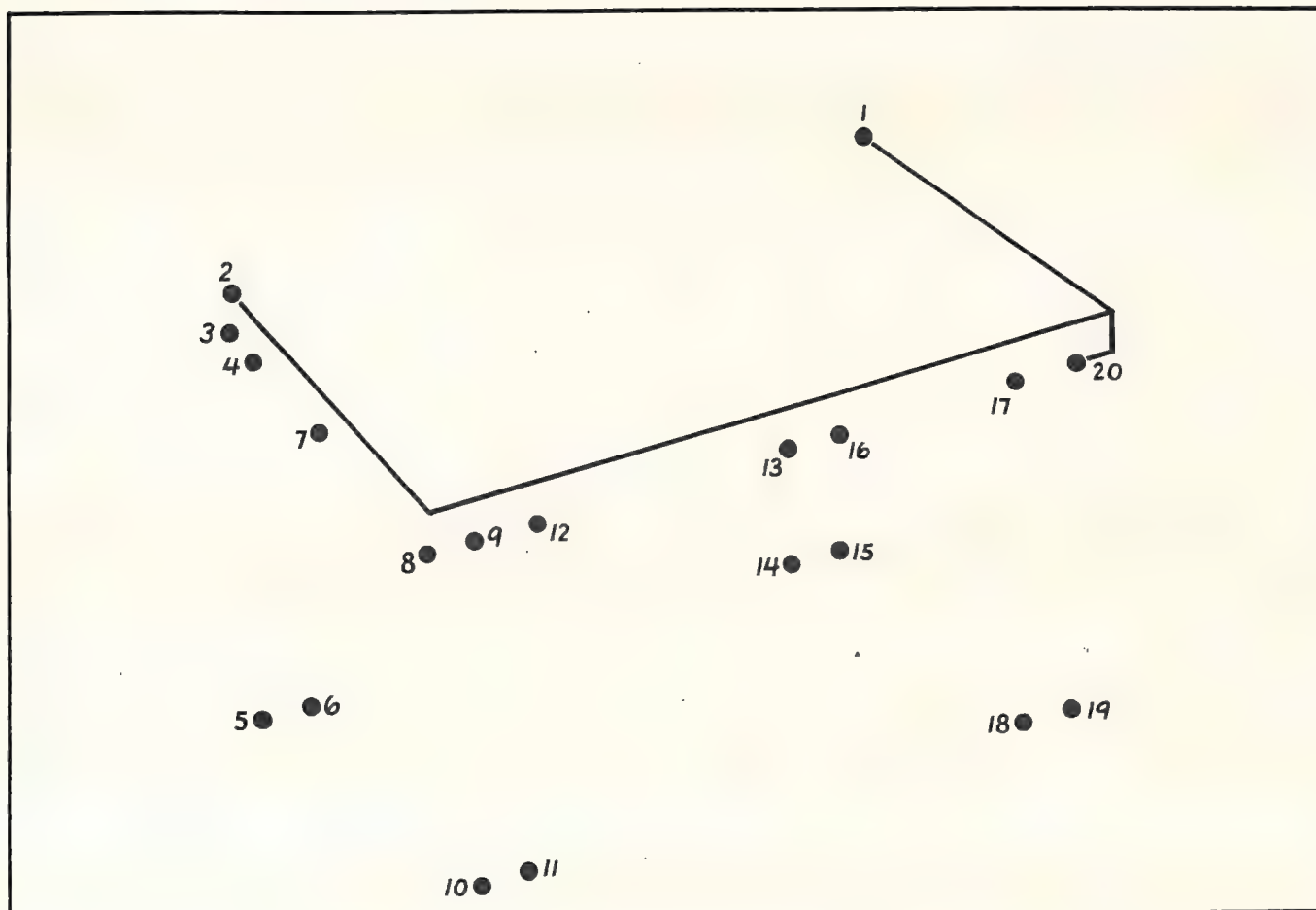
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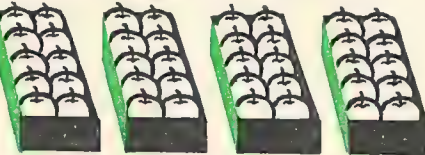
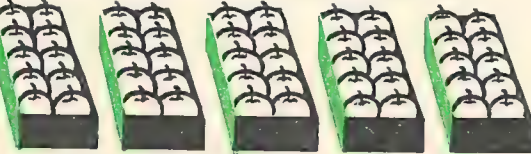




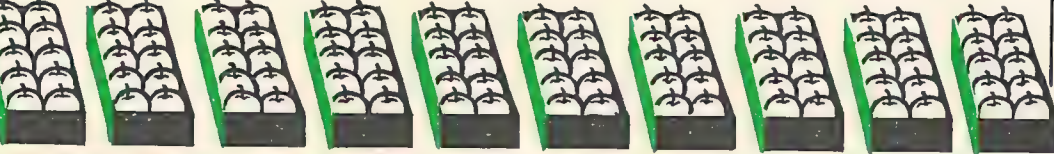





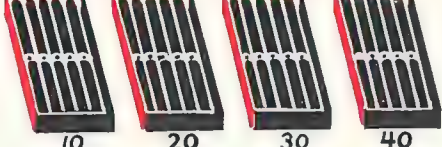
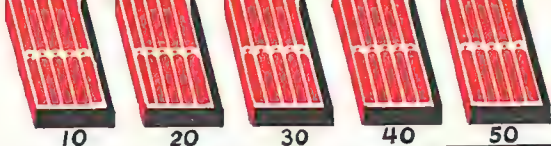
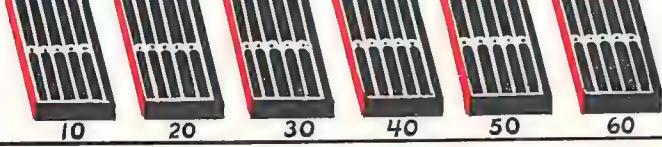

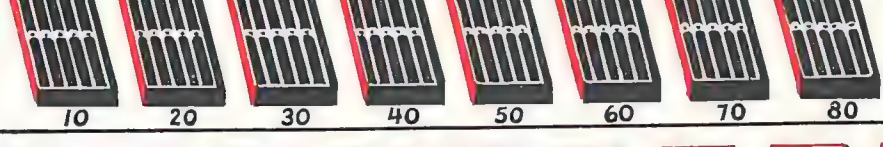


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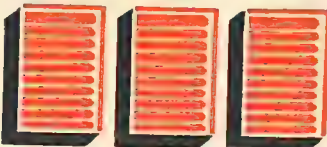



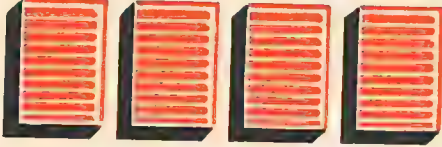
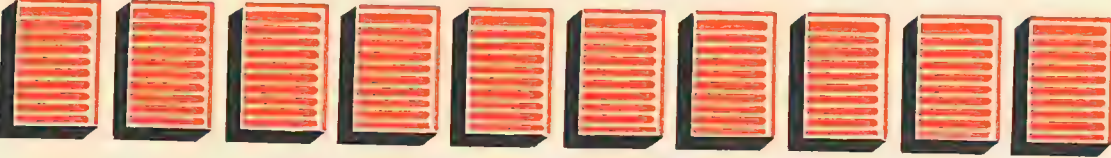
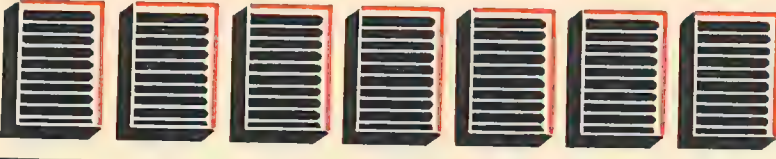


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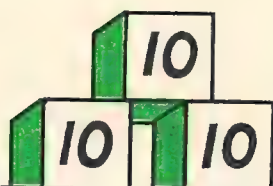


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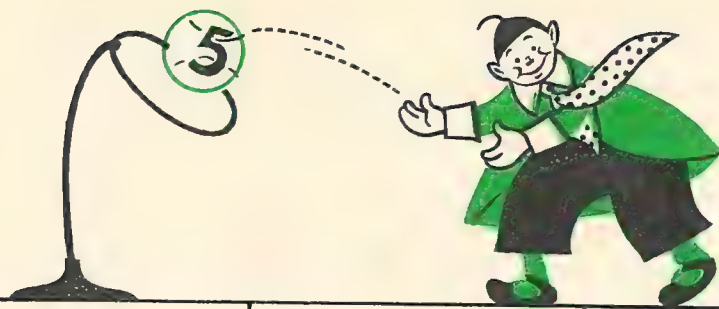
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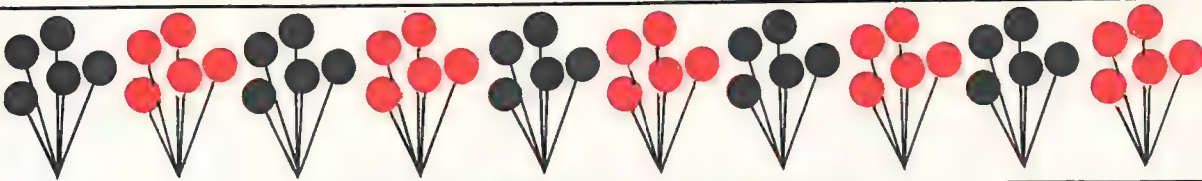

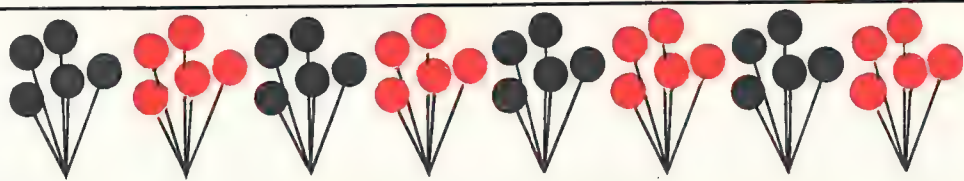

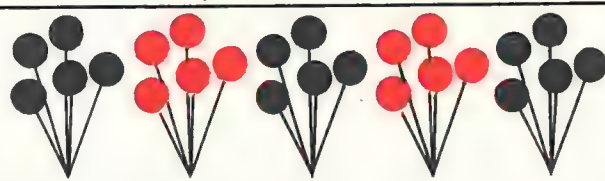
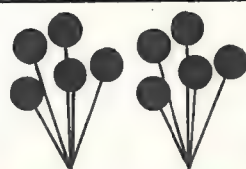
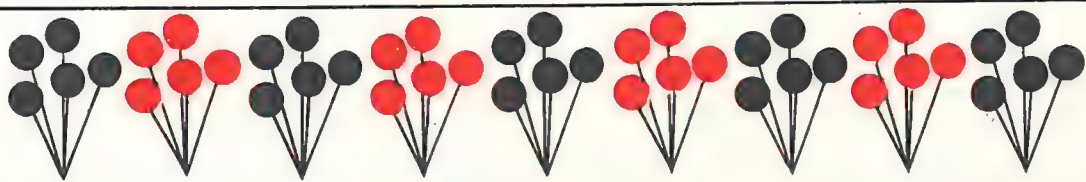

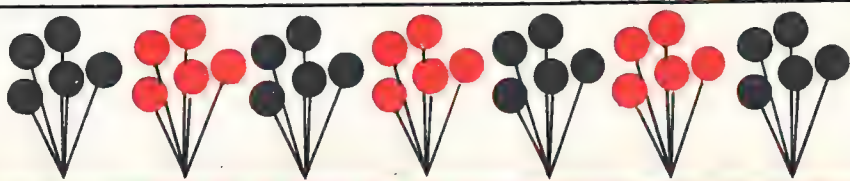
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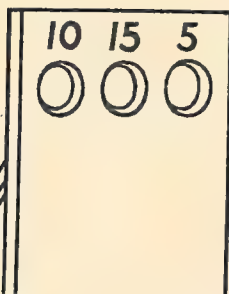


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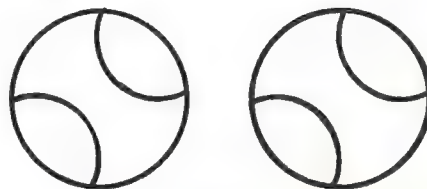
	
	
	
	
	
	
	
	
	
	



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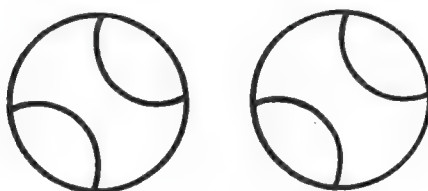
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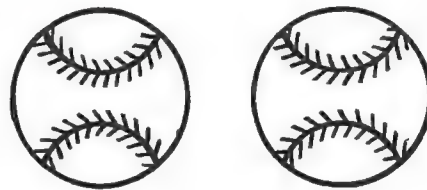
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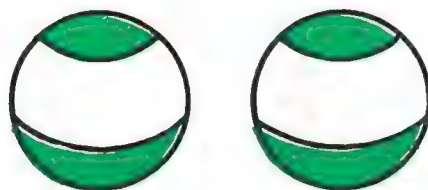
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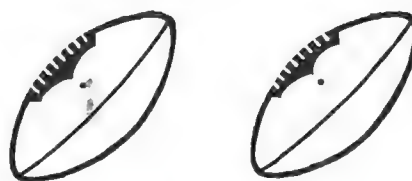
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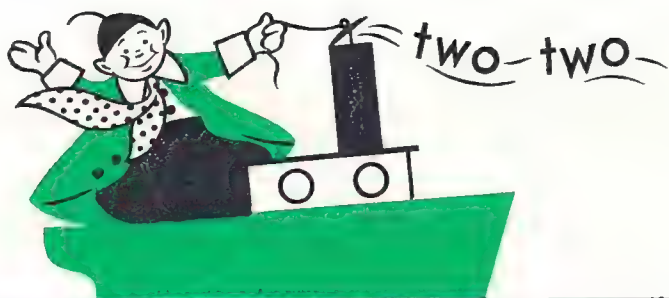
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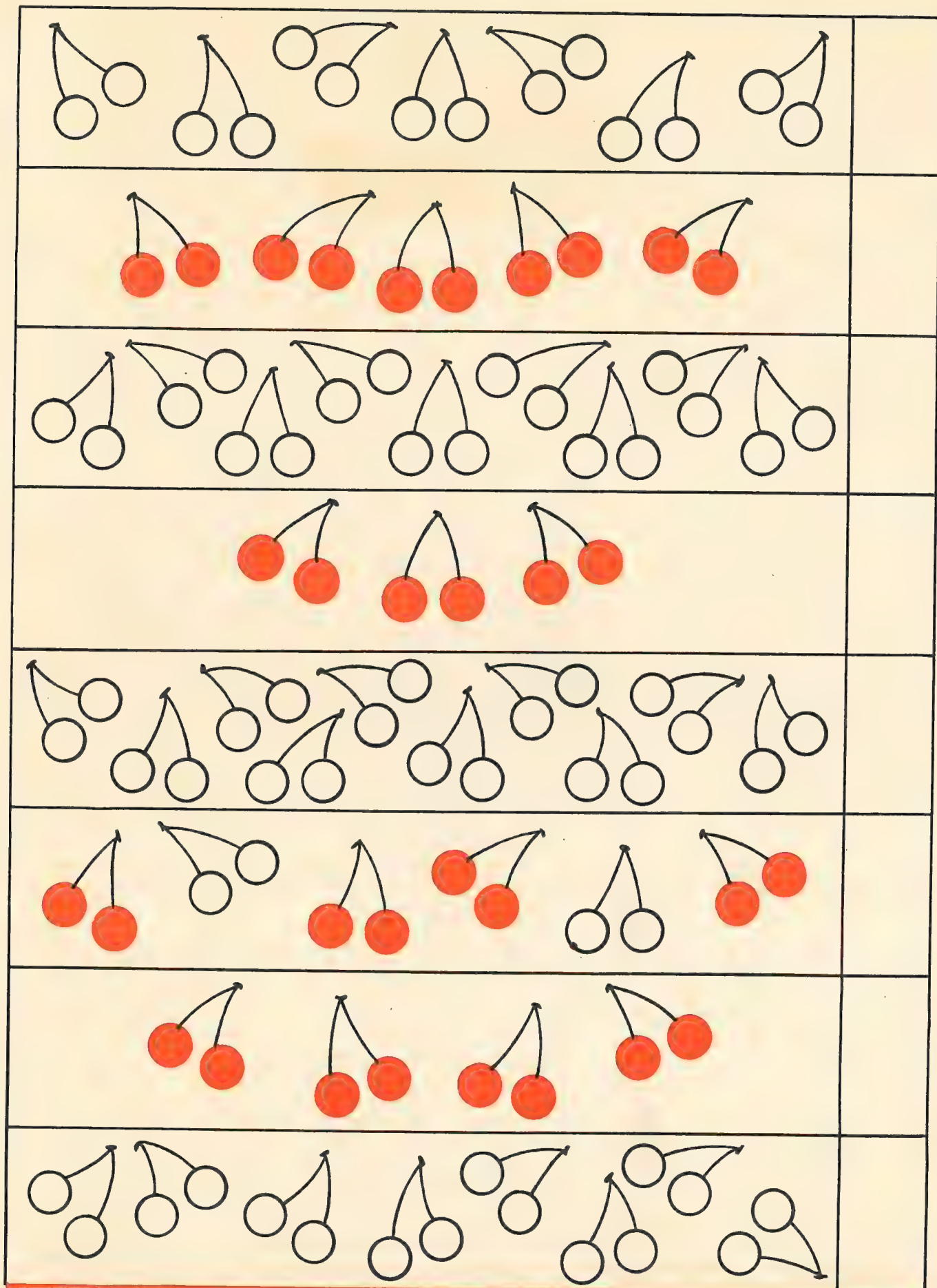
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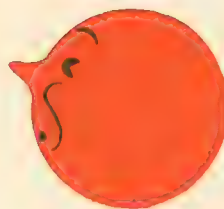
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20





big



little



big
little
little
big
little

little
big
little
big
big



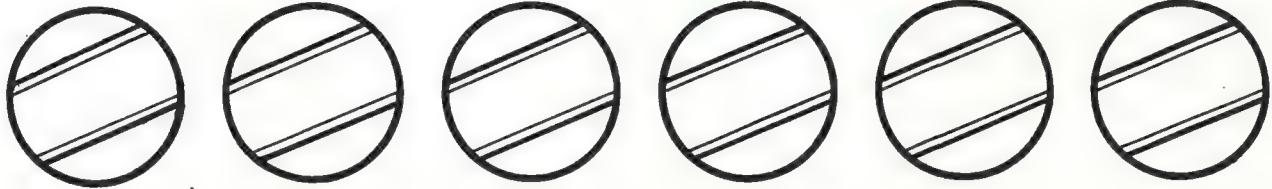
tree



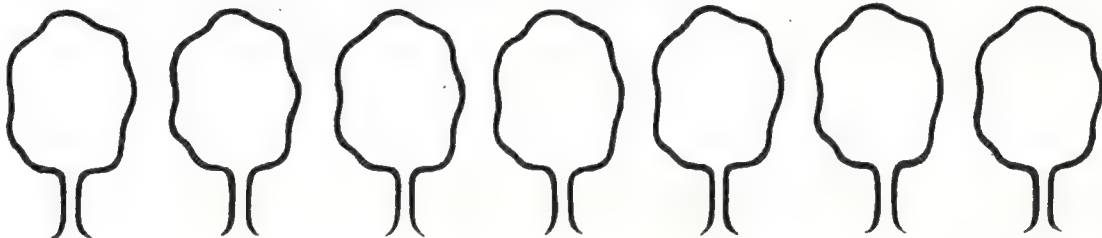
ball



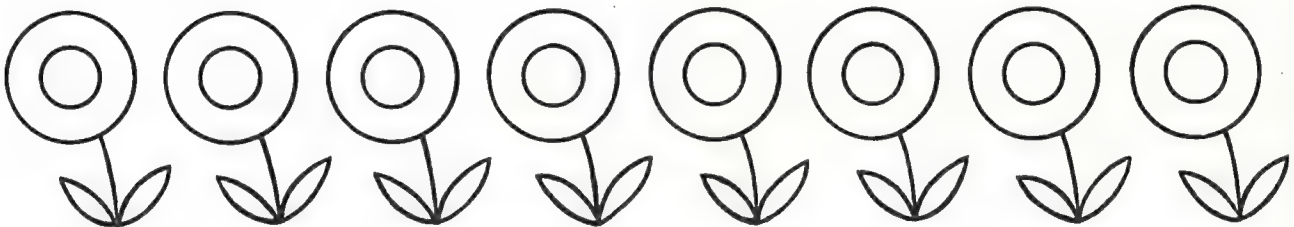
flower



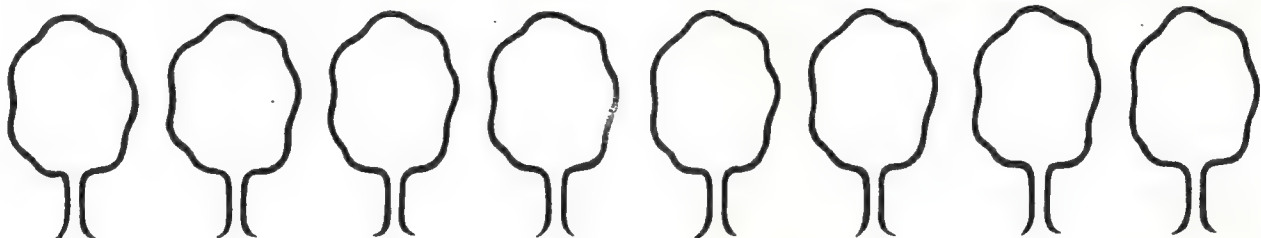
Color 4 balls



Color 5 trees



Color 7 flowers



Color 6 trees



wagon



house

Draw 3 wagons . . Color

Draw 5 houses . . Color

Draw 4 wagons . . Color

Draw 6 wagons . . Color

Draw 6 big balls . . Color 3

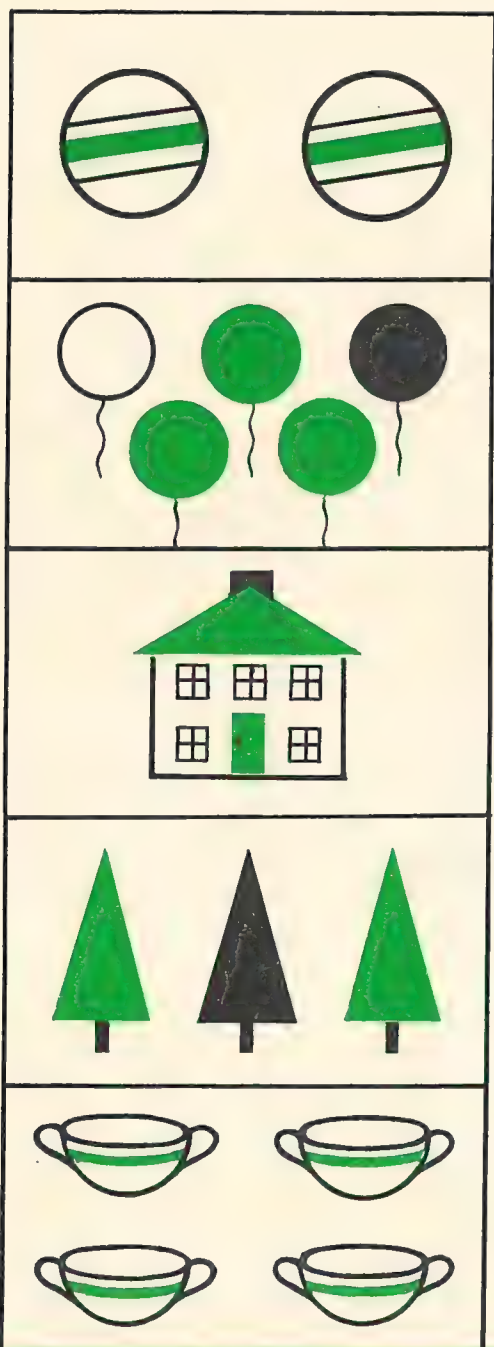
Draw 8 little houses . . Color 5

Draw 5 big flowers . . Color 3

Draw 8 little wagons . . Color 5



1 one	2 two	3 three	4 four	5 five
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one two three four five

one two three four five

one two three four five

one two three four five

one two three four five

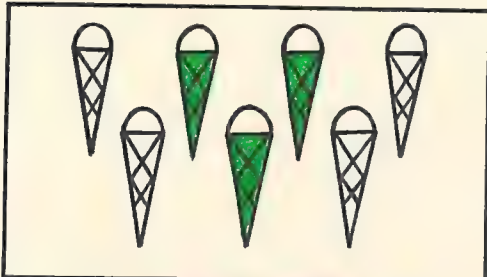
1 one	2 two	3 three	4 four	5 five



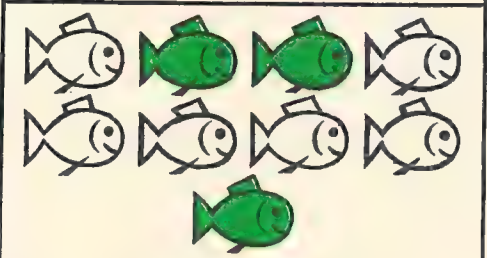
one	four	three	two	three
three	one	five	four	one
two	five	one	three	five
five	three	two	one	four
four	two	four	five	two



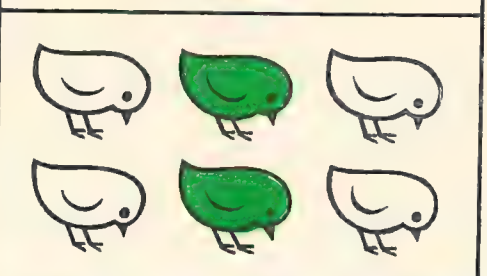
6 six	7 seven	8 eight	9 nine	10 ten
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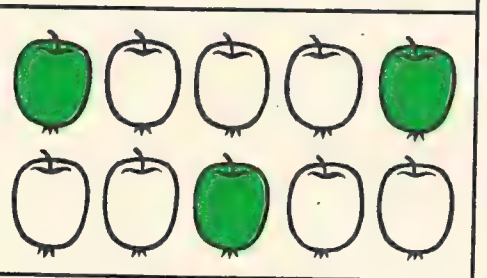
six seven eight nine ten



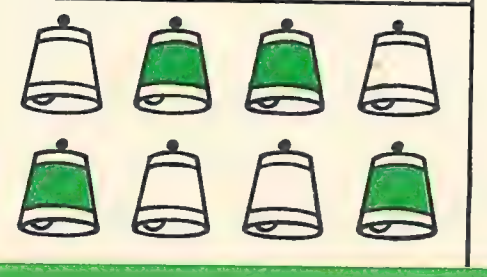
six seven eight nine ten



six seven eight nine ten



six seven eight nine ten

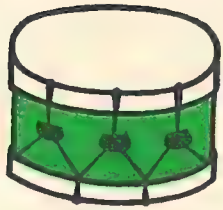


six seven eight nine ten

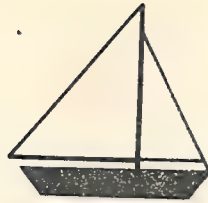
6 six	7 seven	8 eight	9 nine	10 ten



seven	six	eight	eight	nine
six	nine	seven	six	eight
ten	six	nine	ten	six
eight	seven	eight	seven	ten
nine	ten	ten	nine	seven



drum



boat



apple

Draw five big drums

Draw eight little flowers

Draw three big trees

Draw nine little balls

Draw seven little trees



Draw four big boats

Draw six little apples

Draw ten little flowers

Draw two big drums

Draw one big boat



circle



square

Draw two big circles

Draw five little squares

Draw six little circles

Draw three big squares

9 10

11

23

7

15

27

5

13

21

8

10

24

3

12

25

6

19

28



and



2



and



and



and



and



	<div>and</div>
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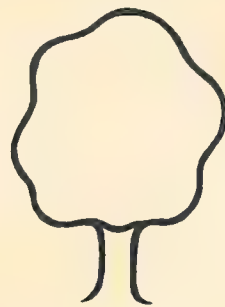
	<div>and</div>
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	<div>and</div>
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	<div>and</div>
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and



and



and



and

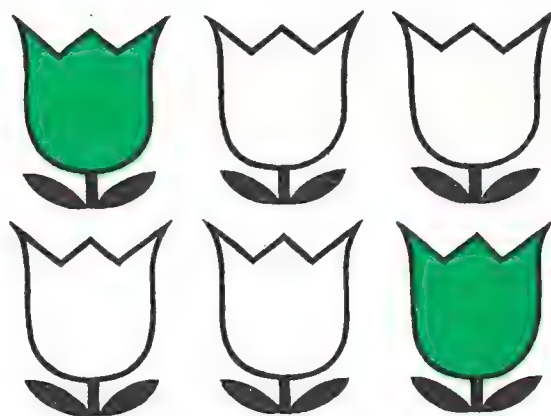


and

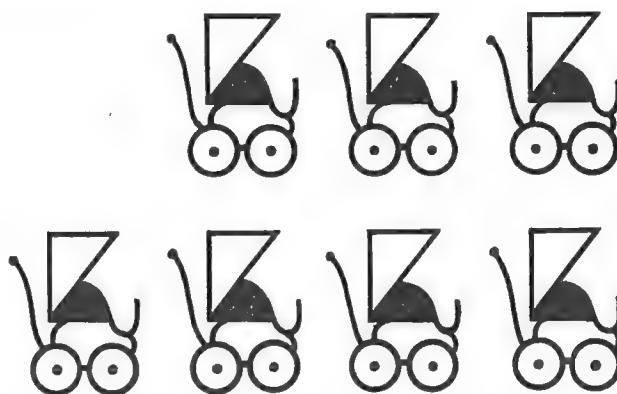




and



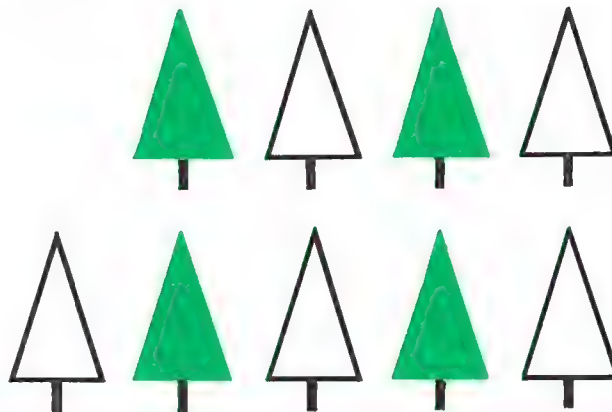
and



and



and



2	I	
7	I	
5	I	
3	I	

6	I	
9	I	
4	I	
8	I	

1

6

1

9

1

3

1

7

/	2	
/	5	
/	8	
/	4	
56		



2 and 1 are

.....
.....

$$\begin{array}{r} 2 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +1 \\ \hline \end{array}$$



1 and 2 are

.....
.....

$$\begin{array}{r} 1 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +2 \\ \hline \end{array}$$



3 and 1 are

.....
.....

$$\begin{array}{r} 3 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +1 \\ \hline \end{array}$$



1 and 3 are

.....
.....

$$\begin{array}{r} 1 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +3 \\ \hline \end{array}$$



4



1

are

$$\begin{array}{r} 4 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ +1 \\ \hline \end{array}$$

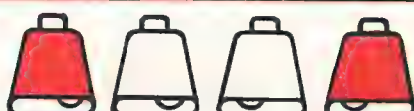
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$$\begin{array}{r} 4 \\ +1 \\ \hline \end{array}$$



1

and



4

are

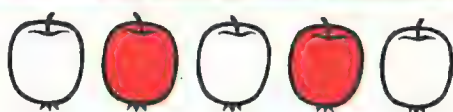
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$$\begin{array}{r} 1 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +4 \\ \hline \end{array}$$



5

and



1

are

$$\begin{array}{r} 5 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ +1 \\ \hline \end{array}$$



1

and



5

are

$$\begin{array}{r} 1 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +5 \\ \hline \end{array}$$



6

and 1

are

$$\begin{array}{r} 6 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ +1 \\ \hline \end{array}$$



1 and

6

are

$$\begin{array}{r} 1 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +6 \\ \hline \end{array}$$



7

and 1

are

$$\begin{array}{r} 7 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ +1 \\ \hline \end{array}$$



1 and

6

are

$$\begin{array}{r} 1 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +6 \\ \hline \end{array}$$



8

and / are

$$\begin{array}{r} 8 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ +1 \\ \hline \end{array}$$



/ and

8

are

$$\begin{array}{r} 1 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +8 \\ \hline \end{array}$$



9

and / are

$$\begin{array}{r} 9 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +1 \\ \hline \end{array}$$



/ and

9

are

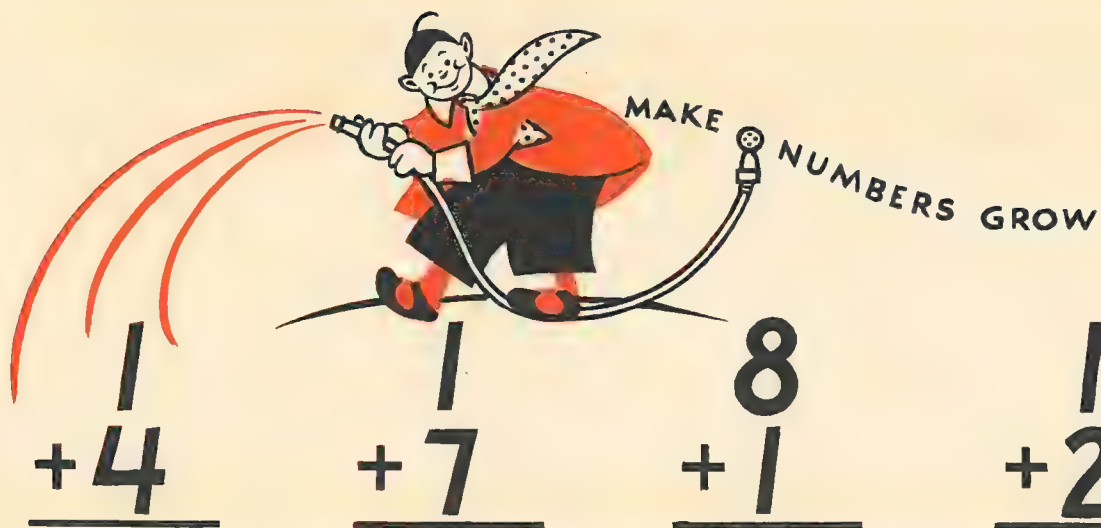
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$$\begin{array}{r} 1 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +9 \\ \hline \end{array}$$



$$\begin{array}{r} 1 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +7 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +7 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ +1 \\ \hline \end{array}$$

7

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24

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18

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16

30

8

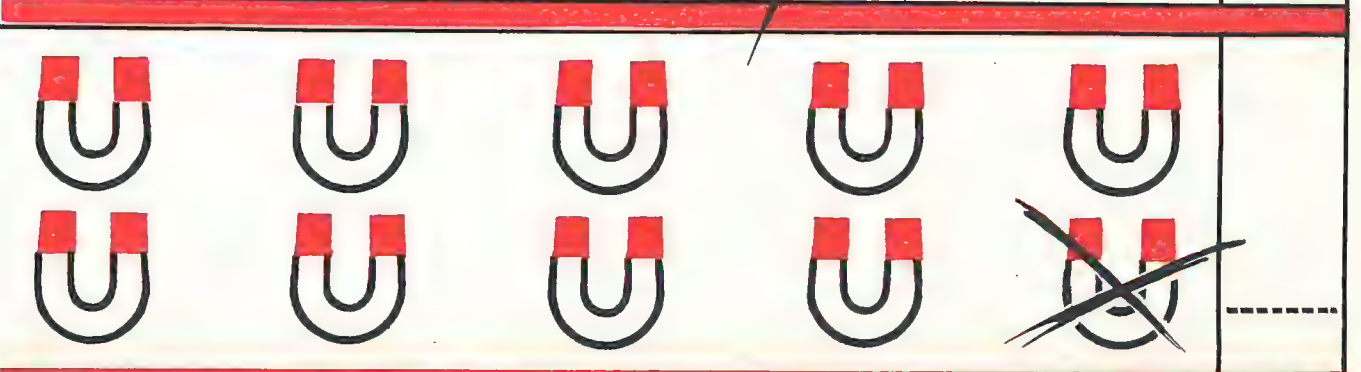
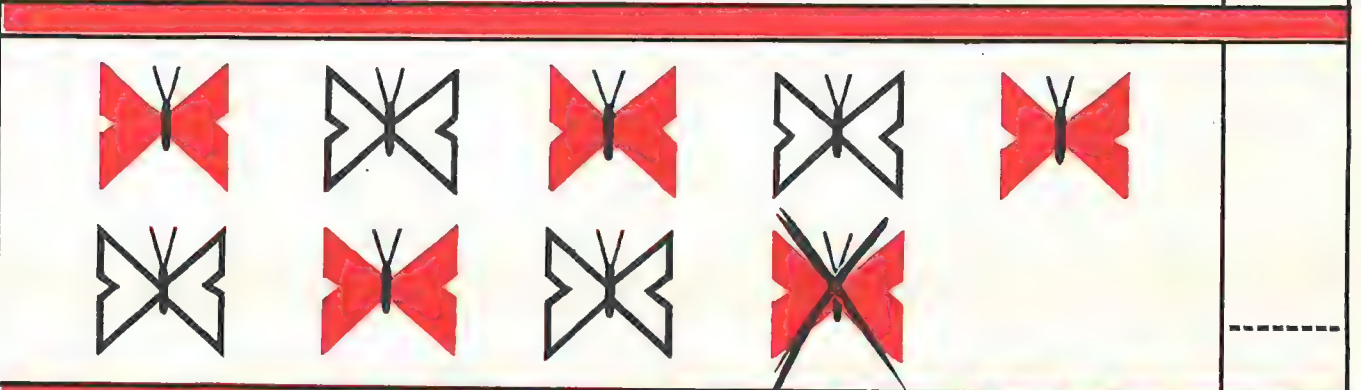
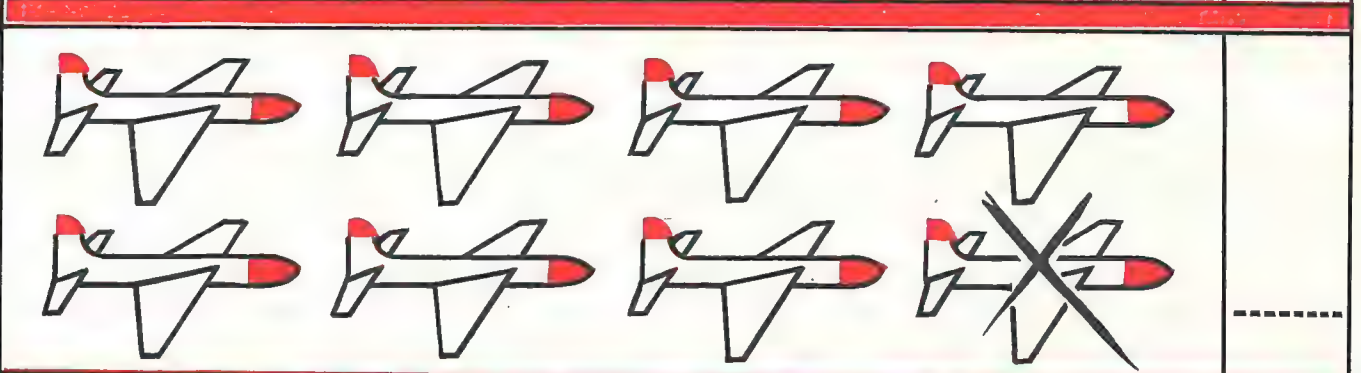
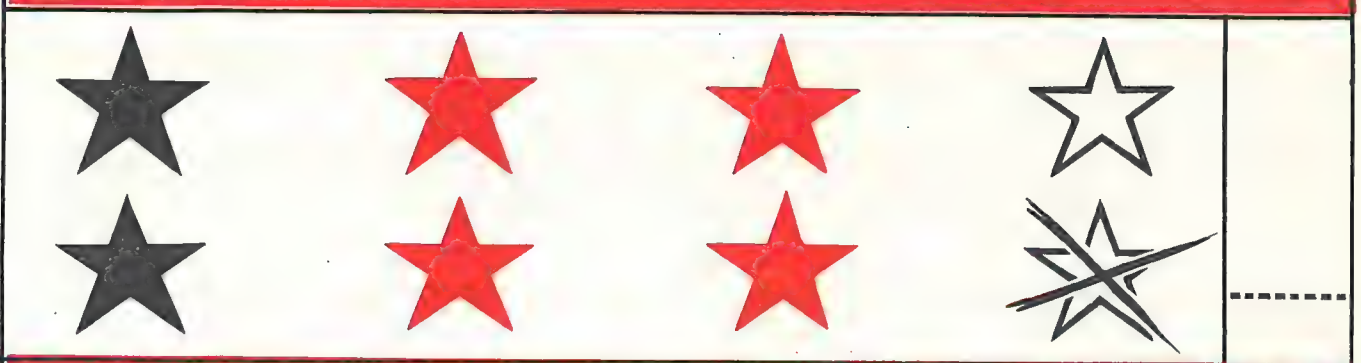
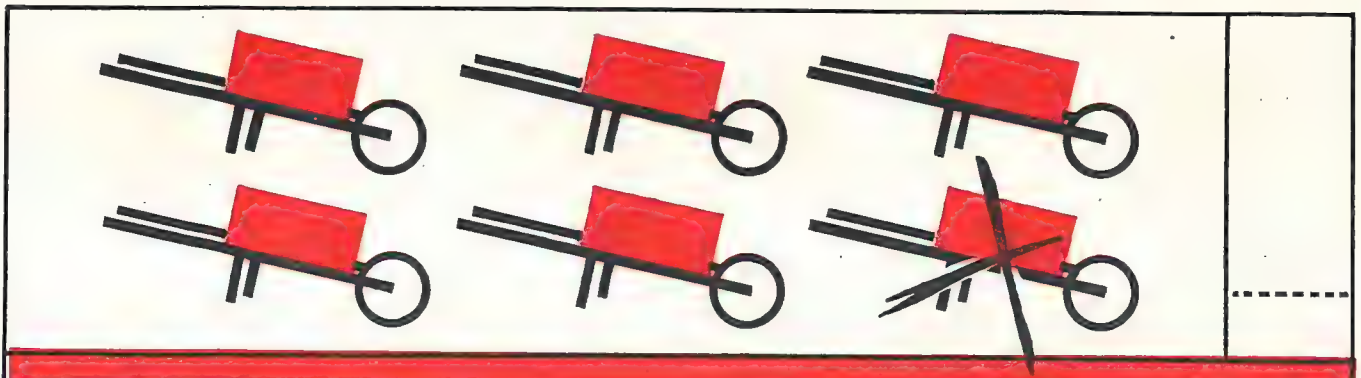
19

36



1







6
-1



6
-1



6
-1



6
-1



6
-1



10
-1



10
-1



10
-1



10
-1



10
-1



9
-1



9
-1



9
-1



9
-1



9
-1



7
-1



7
-1



7
-1



7
-1



7
-1



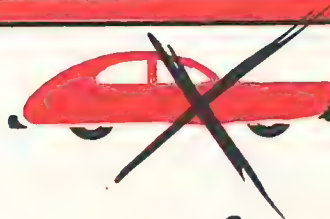
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$$\begin{array}{r} 4 \\ -1 \\ \hline \end{array}$$



$$\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$$



$$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$



$$\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$$

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$$\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$$



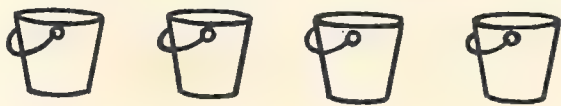
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$$\begin{array}{r} 8 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ -1 \\ \hline \end{array}$$



| from 4 is

$$\begin{array}{r} 4 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ -1 \\ \hline \end{array}$$



| from 7 is

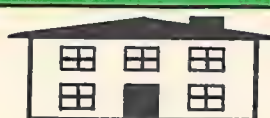
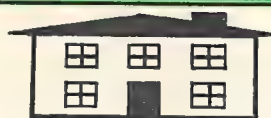
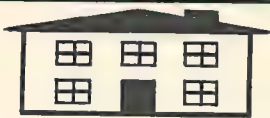
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$$\begin{array}{r} 7 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -1 \\ \hline \end{array}$$



| from 3 is

$$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$



| from 6 is

$$\begin{array}{r} 6 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -1 \\ \hline \end{array}$$

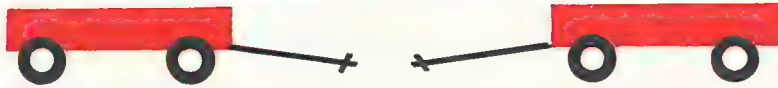
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$$\begin{array}{r} 6 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -1 \\ \hline \end{array}$$



1 from 10 is _____
 $\begin{array}{r} 10 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 10 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 10 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 10 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 10 \\ -1 \\ \hline \end{array}$



1 from 2 is _____
 $\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$



1 from 8 is _____
 $\begin{array}{r} 8 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 8 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 8 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 8 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 8 \\ -1 \\ \hline \end{array}$



1 from 5 is _____
 $\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$



1 from 9 is _____
 $\begin{array}{r} 9 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 9 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 9 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 9 \\ -1 \\ \hline \end{array}$ $\begin{array}{r} 9 \\ -1 \\ \hline \end{array}$



$$\begin{array}{r} 9 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$

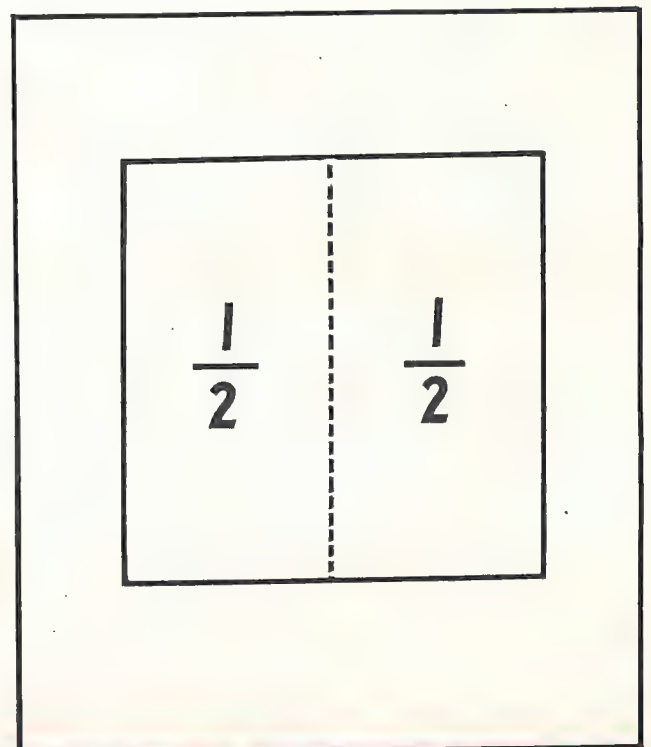
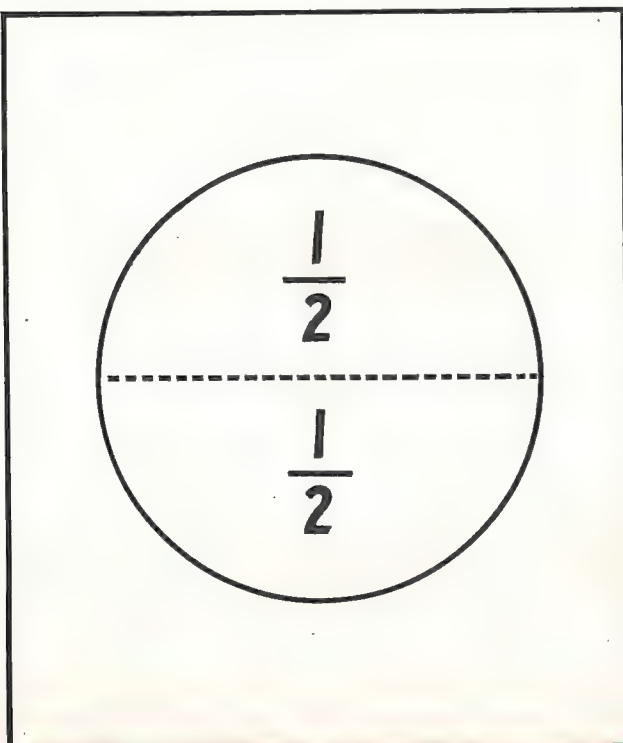
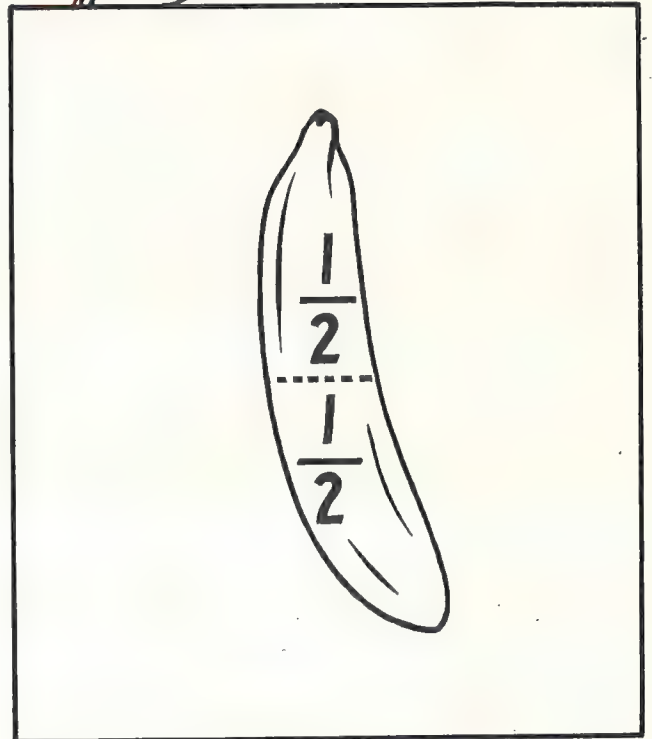
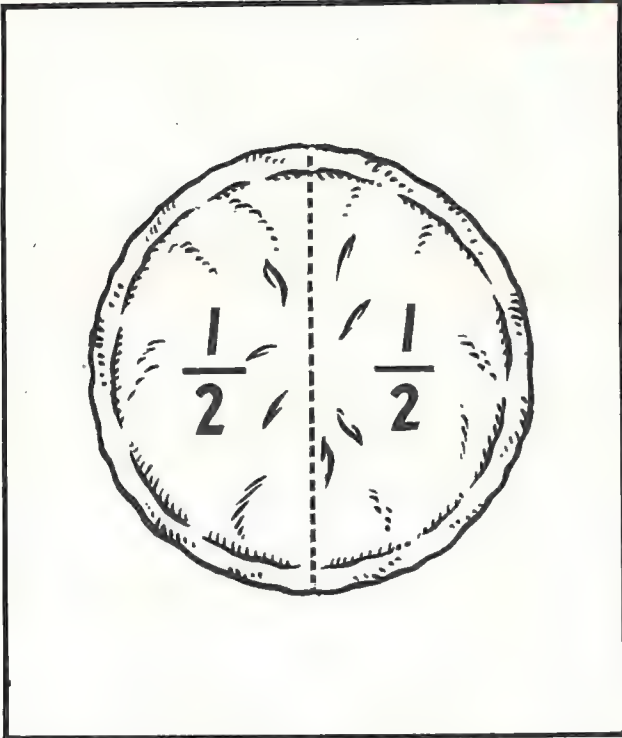
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$$\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ -1 \\ \hline \end{array}$$

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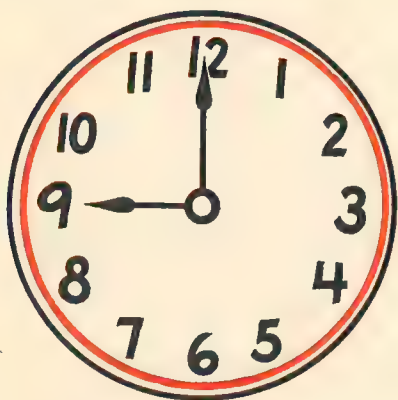




8 o'clock



4 o'clock



..... o'clock



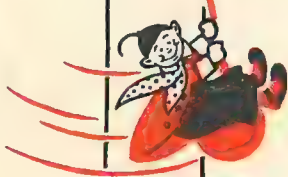
..... o'clock



..... o'clock



..... o'clock





1			
2			
			40



10

20

100

5

10

50

2

4

20

$$\begin{array}{r} 1 \\ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ 8 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ 8 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$$



DIRECTIONS TO TEACHERS

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Page 1. Teach counting through *twenty* by rote. Children are to count out loud, pointing to each number.

Point out that the teens are in the same sequence as numbers one to ten, only with a one in front of them. Emphasize the similarity in the sounds of 3 and 13, 4 and 14, 5 and 15, and so on.

Page 2. The children are to pretend to put the ten apples in the basket and discover that ten apples are the same as one basket of ten — or that ten ones are the same as one ten. Explain to the children that the one is moved over to the tens column, and the zero is used as a place holder to indicate that there are no more apples.

Let the children tell the story of "*one ten and one more is eleven*," and so on.

Page 3. The children are to continue telling the stories about the pictures *one ten and three ones are thirteen*, *one ten and four ones are fourteen*, and so on. After one ten and nine ones, *one more* would be *two tens* and *no more*.

Page 4. The children are to count the ten balls and then the one, making eleven. They are to write the number of balls in the empty space beside each line.

Emphasize that they are counting *ten* balls and *one* ball, *ten* balls and *two* balls, and so on, and that the *one* to the left of each number means *one ten*, so that they are writing *one ten and one*, *one ten and two*, etc.

Page 5. Direct the children to add ten to each number by putting a *one* to the left of it, making each number a *teen* number instead of what it says. Emphasize the fact that the sequence *one through nine* is the same, and the one in front of each number stands for *one ten*.

Page 6. Direct the children to write the numbers eleven through nineteen in the empty spaces, starting at the top with eleven each time.

Page 7. To teach the concept of teens.

The children must understand that eleven is one ten and one more (unit). Have them observe that the sequence from one through nine is the same, but the *teens* have a *one* in front of each number, the one standing for *one ten*. Say to the children, "Ten and one more are how much?" etc. Children are to write the correct numbers in the right-hand spaces.

Page 8. To match numbers. Direct the children to draw a line from eleven to eleven, twelve to twelve, etc.

Pages 9, 10. The children are to count cups, *ten*, and eleven, twelve, thirteen, fourteen, fifteen, sixteen; and so on. at the right; *ten* triangles, and eleven, twelve, thirteen, fourteen, fifteen, sixteen; and so on.

Emphasize the fact that they are counting "ten and" to make the teens.

Page 11. Direct the children to read the first row of numbers (left-hand side), eleven through nineteen. They are then to fill in the spaces in the other rows, always starting at the top with *eleven*.

Pages 12, 13. The children are to draw the number of objects needed to make the number specified.

Explain that there are ten pumpkins in the first box. They are to draw two more in the blank space to make twelve. There are ten trees in the second box. How many more trees must they draw to make seventeen? Draw them. Continue this way to the end of the page.

Page 14. Direct the children to start at the top of each row with eleven and count to twenty.

Emphasize the fact that the sequence is the same as in one to ten.

Pages 15, 16. Direct the child to start at number one and draw a line to two, then to three, then to four, and so on, connecting all numbers in sequence.

Page 17. The children are to count the number of apples by tens. They are to say, one ten, two tens, three tens, and so on. Have them point to each box while counting.

Emphasize the fact that the sequence of one to ten is the same. Some pupils may make this discovery themselves.

The children should discover also the similarity in the words "four tens" and "forty," "five tens" and "fifty," "six tens" and "sixty," and so on. Ask how many boxes in twenty; how many tens in twenty.

Page 18. The children are to count the pencils in each row by tens. Have them point to each box while counting and write the number of pencils in the space at the end of the row.

Ask, "How many boxes of pencils in twenty? How many tens in 20?" etc.

Page 19. The children are to start at the top of each row, with ten, and count to one hundred, writing in the missing numbers.

Page 20. The children are to count by tens, from 10 to 100, starting at the top of each row with ten.

Page 21. The children are to count the number of pencils in each row by tens and write the number in the space beside each row.

Page 22. The children are to count orally, pointing to each number.

The children are to understand that thirteen is *one ten and three units*, twenty is *two tens*, and so on. Have them observe the sequence of tens in counting by ones.

Page 23. The children are to write the numbers from one through fifty.

Emphasize the fact that the sequence from one to ten is always the same. Count to ten; then the teens are *one ten* and *one one*, *one ten* and *two ones*, etc. Then twenty is two tens, etc.

Pages 24, 25. The children are to count from one through fifty, filling in the empty spaces with the proper sequential numbers.

Page 26. The children are to count orally, pointing to each group of five.

Page 27. The children are to count orally and then write the numbers counting by fives to fifty, starting at the top of the page each time with five.

Page 28. The children are to count the leaves by fives, and put the correct numbers in the empty spaces at the right.

Page 29. The children are to start at the top of each row, counting by fives and filling in the correct numbers as they are left out.

Page 30. The children are to count the number of balloons by fives and write the correct totals in the empty spaces at the right.

Page 31. Direct the children to count from five through fifty, filling in the empty spaces with the correct numbers.

- Page 32.** To visualize groups of twos. The children are to count the balls by twos, pointing to each group.
- Page 33.** Direct the children to write the numbers from two through twenty, counting by twos. Emphasize that the sequence two through eight is the same in the teens.
- Page 34.** Direct the children to start at the top of each row with 2 and fill in the numbers, counting by twos.
- Page 35.** The children are to count the cherries by twos and write the correct answers in the spaces at the right.
- Page 36.** The children are to write in the missing numbers, counting from two to twenty by twos.

The rest of the exercises introduce words as well as figures. It is very important for the teacher to familiarize herself with these words, planning their inclusion if necessary in the basal reading program. In any case, a plan of association should be worked out, so that a minimum of time is needed for prompt association of the printed word (and sounded word) with its number process. For quick reference, the following words are introduced

big	color	ball	draw	house	drum	circle	and	from
little	tree	flower	wagon	apple	boat	square	are	
one two three four five six seven eight nine ten								

- Page 37.** Introducing the words *big, little*. The children are to cut out the words at the bottom of the page and paste them in the correct column at the top. Do not do the cutting and pasting until page 38 has been completed.
- Page 38.** Introducing the words *color, tree, ball, flower*. To develop the ability to select a specified number from a larger number and to follow directions.
- Pages 39, 40.** Introducing the words *draw, wagon, house*. To further develop the ability to follow directions.
- Page 41.** Introducing the number words *one* through *five*. The children are to count objects and draw a line around the word that matches the number.
- Page 42.** Direct the children to cut out the words at the bottom of the page and paste them in the columns under the proper heading.
- Page 43.** Introducing number words *six* through *ten*.
The children are to count the objects and draw a line around the word that matches the number.
- Page 44.** Direct the children to cut out the words at the bottom of the page and paste them in the columns under the proper heading.
- Pages 45, 46.** Introducing the words *drum, boat, apple*. To develop the ability to follow written directions.
- Page 47.** Introducing the words *circle, square*.
- Page 48.** Preparation for simple addition facts. The children are to write the next number in sequence on the dotted lines. Explain to the children that they are writing the number which is *one more*.
- Pages 49, 50.** To teach simple addition facts through the use of pictures and to discover the answers for themselves. Introduce the word *and*.
The children are to realize that when adding *one* to any number, the answer is the next in sequence.
- Pages 51, 52.** Show the children with objects that two and one is the same as one and two, etc.
- Pages 53-56.** The children are to draw their own pictures to illustrate addition facts. Answers are to be written on the dotted lines.
They are to recognize the fact that two of any object and one of the *same object* can be added to make a new number, or one object and any number of the same object can be added to make a new number.
- Pages 57-60.** Introducing the word *are*.
The children are to read the picture stories and then the number stories and write the answers on the dotted lines. Show the children a short way to write the same story, using only numbers. Explain the *plus* sign.
- Page 61.** This exercise needs no explanation. It is like the previous exercises without the dressing up.
- Page 62.** Preparation for simple subtraction facts. The children are to write the number that comes before the printed number. Explain to the children that they are writing the number which is *one less*.
- Pages 63, 64.** Ask the children, "How many balls are there? If we take one away, how many are left?"
The children are to write the number left on the dotted lines after one item is crossed off. Explain that when taking one away, the answer is the number preceding it in sequence.
- Pages 65, 66.** Show the children the short way to write "6 take away 1." Explain the subtraction sign.
The children are to count the objects, take one away, and write the answers.
- Pages 67, 68.** Introducing the word *from*. Direct the children to count the objects, then to cross out *one* object with crayon. Write the answers on the dotted lines. Also write the answers of the number problems.
- Page 69.** This exercise is like the one on page 61 except that it is for "take away" instead of "add to."
- Page 70.** Explain to the children that to divide anything into two equal parts is to divide it into halves, and each part is one half. Direct them to color one-half of each object.
- Page 71.** Explain to the children that the short hand is the four hand. When the long hand is on the twelve, it is on the hour, and we say 8 o'clock, or 4 o'clock.
Have the children write the time on the other clocks on the dotted lines. The children may make their own clocks from cardboard. The hand can be fastened on with a roundhead fastener, so that the hands will be movable.
- Page 72.** The children are to count by ones to forty, putting the proper number in each square, and going down the columns from top to bottom.
- Page 73.** The children are to count by tens to one hundred; by fives to fifty; and by twos to twenty.
- Page 74.** This exercise can be used as a test.

